

ABSTRACT OF THE DISCLOSURE

5 An astrometry system comprises an astrometry first telescope having first and second sightlines respectively corresponding to first and second fields of view and a first star detector system in a first focal plane. A first optical system combines first and second light beams from stars in the first and second fields of view and substantially parallel to the first and second sightlines and delivers them to the first star detector system. A second telescope has a third sightline substantially parallel to one of the first and second sightlines. There is a second star detector in at least one second focal plane. A second optical system collects a third light beam from the stars substantially parallel to the third sightline and delivers it to the second star detector. A processor determines the source field of view of each star detected as a function of whether it is detected either by only the first  
10 detector or conjointly by the first and second detectors.  
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